

NEW SPECIES OF MYRISTICACEAE,
COMBRETACEAE, AND URTICACEAE FROM
COASTAL COLOMBIA AND ECUADOR

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This paper describes three additional new species included in our recent collections from the coastal lowland forests of Colombia and Ecuador. Two of these species are canopy trees, one of them locally valued for timber. The new species are Iryanthera porcata A. Gentry, Terminalia valverdeae A. Gentry, and Pilea foreroi A. Gentry.

IRYANTHERA PORCATA A. Gentry, sp. nov.

Arbor ramulis glabratis. Folia subcoriacea, oblonga, ad basim cuneata, venatione brochidodroma. Inflorescentia racemiformis. Fructus depresso-globosus, 6 cm diametro, longitudinaliter porcatus.

Tree 20 m tall; branchlets inconspicuously sericeous with Malpighiaceae trichomes, soon glabrate. Leaves subcoriaceous, oblong, apices not seen, the base broadly cuneate to rounded, ca. 20-25 cm long, 4.5-6 cm wide, below flecked with scattered minute whitish 2-armed trichomes, ca. 20-23 (or more?) secondary veins on a side, the venation (except midvein) plane above, 3° venation plane below, 2° nerves below prominent and distinctly brochidodromous; petiole canaliculate, 1-1.5 cm long. Female inflorescence a cluster of several racemiform branches ca. 8 cm long, appressed reddish puberulous, conspicuously flattened and twisted between the alternate fascicles of flowers, the pedicels to 4 mm long. Female flowers minute, the triangular tepals ca. 1.5 mm long, rufous-puberulous. Fruit strongly depressed globose, ca. 6 cm in diameter, ca. 4.5 cm long, strongly longitudinally ridged and furrowed, also minutely corrugated, glabrous except inconspicuous scattered minute whitish T-shaped trichomes.

Type: COLOMBIA: Chocó: Road from Yuto to Lloró, alt. 50 m, pluvial forest along creek, ca. 2 km E of Yuto, 18 Jan 1979, Gentry and Renteria 24365 (holotype, COL; isotypes, INPA, MO, HUA, to be distributed)

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In the absence of male flowers, sectional placement is problematic. Vegetatively this species seems close to Amazonian I. lancifolia Ducke, but that species has smooth rather than conspicuously ridged fruits. Iryanthera grandis Ducke, also Amazonian, has somewhat similar fruits which, despite being noted by A. C. Smith (1937) as the largest in the genus, differ in being smaller (4.5-5 cm diameter) and with a fenestrated rather than ridged surface. The only sympatric species similar to I. porcata is I. megistophylla A. C. Smith which has mostly much larger leaves and a smaller more transversely oblong fruit with a smooth to fenestrated-rugose surface.

TERMINALIA VALVERDEAE A. Gentry, sp. nov. -- Figure 1.

Arbor grandis. Folia obovata, petiolis 1-2 cm longis. Fructus transversim oblongi, bialati, 7-8 cm lati, corporibus carinatis, puberulis.

Large tree 30 m tall, bark longitudinally narrowly ridged; branchlets sparsely subappressed-pilose when young, glabrescent, irregularly longitudinally striate. Leaves obovate, acutish to obtuse at apex, cuneate to obtuse at base, chartaceous, 8-15 cm long, 3-7 cm wide, the 3^o venation plane above, prominulous below, glabrous above, below usually very sparsely scattered-puberulous near base of midvein and secondary veins; petiole slender, 1-2 cm long, glabrous or with a few scattered trichomes. Inflorescence (in fruit) puberulous. Flowers not seen. Fruits very large, transversely oblong, bialate, 2.2-3 cm long at center, 3.5-4.3 cm long across wings, 7-8 cm wide, the wings brown, subwoody, broader toward apices, the margins scalloped, the body flattened dorsally and sharply keeled ventrally, distinctly triangular in section, puberulous.

Type: ECUADOR: Guayas: Cerro Azul, entrado por Casas Viejas, Cordillera de Chongon, 200 m alt., Aug 1978, F. M. Valverde 301 (holotype, MO; isotypes, ECU, SEL).

Endemic to the wetter parts of the Cordillera de Chongon, north of Guayaquil in coastal Ecuador.

This species has one of the largest fruits of any New World Terminalia and is unique among neotropical species of the genus in having the wings broadest near their apices rather than gradually contracted apically and in having dis-

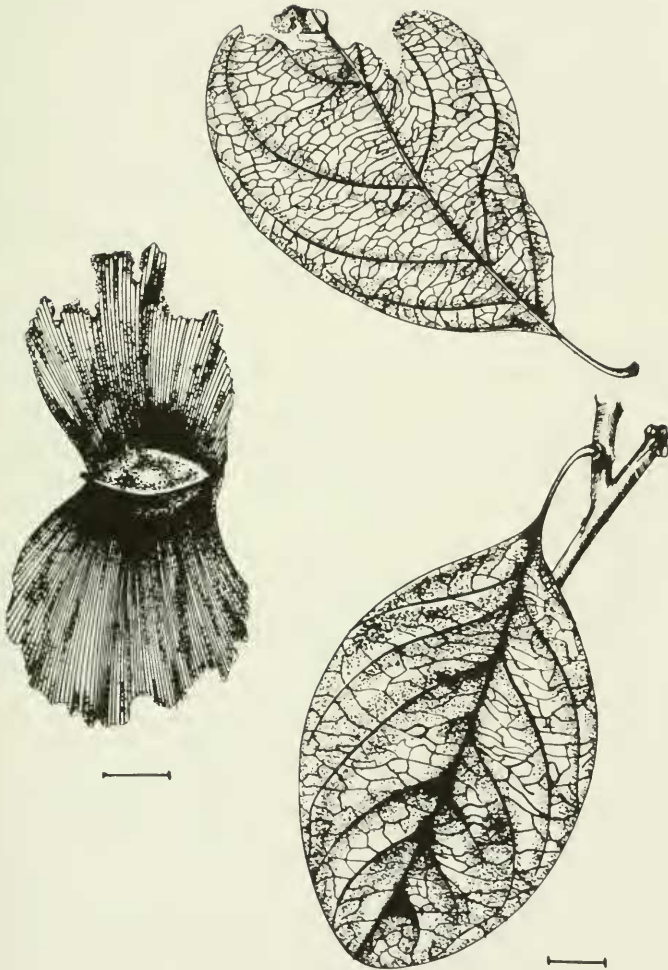


Figure 1. Terminalia valverdeae A. Gentry. From Valverde 301 (ECU). Lines represent 1 cm.

tinctly differentiated dorsal and ventral sides on account of the strongly keeled seed body. Its closest neotropical relative is probably T. januariensis DC. which approaches it in fruit size but has narrower wings and a less keeled body. Several Old World species of Terminalia such as African T. superba Engl. & Diels and T. orbicularis Engl. & Diels and southeast Asian T. subspathulata King have large fruits which may be distinctly keeled. Since some Old World species of Terminalia are sporadically cultivated in the neotropics, I at first suspected that the very distinctive Ecuadorian plant might represent an escape from cultivation. However, no Old World species represented at MO combines the sharp ventral keel and very large wings broader near the apex which characterize T. valverdeae. Moreover, I have observed T. valverdeae in the field and it is a mature forest canopy tree (though its habitat is rapidly disappearing) known to the campesinos as "castaña" and valued as a timber wood.

PILEA FOREROI A. Gentry, sp. nov.

Herba glabra, stipulis foliaceis. Folia late ovata, 20-25 cm longa, basibus subtruncatis atque minute vade cordulatis. Inflorescentia laxe paniculata, floribus minutis. Fructus ovatus, 1 mm longus.

Terrestrial herb, glabrous throughout; stipules foliaceous, oblong-elliptic, 3-3.5 cm long, 1.5-1.7 cm wide, rounded at apex. Leaves broadly ovate, acute to subacuminate at apex, 20-25 cm long, ca. 16 cm wide, broadly symmetrically subtruncate basally, extreme base shallowly subcordate with two short (ca. 2 mm long) broad basal lobes, 3-veined from ca. 1 cm above base, the margin serrulate to shallowly crenate-serrate, drying greenish gray, the main veins contrastingly paler below, the upper surface with linear cystoliths, the lower surface minutely punctate; petiole 15-16 cm long. Inflorescence axillary, openly paniculate, to 14 cm long, pink when fresh. Flowers whitish, minute, ca. 1 mm long, the 4 perianth segments apiculate. Fruits ovate, ca. 1 mm long.

Type: COLOMBIA: Chocó: Carretera Panamericana (en construcción). Río Pato, 5° 55' N, 76° 56' W, 21 Apr 1979, E. Forero, R. Jaramillo, H. Bernal, H. León, and M. Pulido 5477 (holotype, COL; isotype, MO).

In Killip's key (Contributions from the U. S. National Herbarium 26: 367-394. 1936) *P. foreroi* keys out with *P. rusbyi* (Britton) Killip, a completely different Bolivian species, on account of its large almost subentire leaves, long petioles, and open inflorescence. The new species has much larger leaves than any *Pilea* in the collections at MO, F, or US. The leaves are also distinctive in their long petioles and peculiar subcordulate bases. The only species which appears even remotely similar is *P. selbyanorum* Dodson and A. Gentry which has smaller but somewhat similar long-petioled leaves which, though usually peltate, occasionally have a cordate base. *Pilea selbyanorum* has a similar open inflorescence but much smaller stipules, a rounded leaf apex, and its leaf, when not peltate, is much more deeply cordate.

PASSIFLORA CAUDATA A. Gentry

In my description of *Passiflora caudata* (Phytologia 47: 97. 1980) the lines listing the type specimen were inadvertently omitted: ECUADOR. Pichincha: Cooperativa Santa Marta No. 2 along Río Verde 2 km SE of Santo Domingo de los Colorados, 530 m alt., 5 Feb 1979, Dodson, Gentry, and Duke 7585 (holotype, MO; isotypes, ECU, SEL, Río Palenque Science Center).

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